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501.43144X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Toshihiko MURAKAMI

Serial No.: 10/663,732

Filed: September 17, 2003

For: DATA TRANSFER METHOD

**PETITION TO DIRECTOR UNDER 37 CFR §1.181 OF DENIAL OF
PETITION TO MAKE SPECIAL**

MS Petition

Office of Petitions
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

October 24, 2005

Sir:

Applicants hereby Petition for a decision by the Director of the USPTO via the Office of Petitions under 37 CFR §1.181 the denial of a Petition to Make Special originally filed on December 7, 2004, and Renewed on April 11, 2005 and July 11, 2005 under 37 CFR §1.102(d) and MPEP 708.02, VIII (accelerated examination). A decision by the Office of Petitions is urgently requested rather than another decision by the SPRE of Group 2100.

STATEMENT OF FACTS

Applicants filed the original Petition to Make Special on December 7, 2004 (copy attached) in accordance with the procedure as set forth under 37 CFR §1.102(d) and MPEP 708.02, VIII so as obtain accelerated examination of the present application. The December 7, 2004 Petition to Make Special complied with the requirements of 37 §1.102(d) in that (a) a Petition to Make Special was



submitted and accompanied by the appropriate fee, (b) the Petition indicated that all claims are directed to a single invention and that if it is determined that the claims are not directed to a single invention, then Applicants were willing to elect without traverse one of the inventions, (c) the Petition indicated that a pre-examination search was conducted on the invention as claimed, (d) a copy of the references uncovered during the search deemed most closely related to the invention was provided and (e) a detailed discussion of the references was provided describing how the claimed subject matter is patentable over the references.

However, on March 14, 2005 the Petitions Examiner issued a Decision in which it was alleged that the December 7, 2004 Petition did not adequately meet the requirement (e) of submitting a detailed discussion of the references as to how the claimed invention is patentable over such references.

Upon receipt of the March 14, 2005 Decision, Applicants filed a Renewed Request for Reconsideration of the Petition to Make Special on April 11, 2005 (copy attached). The Renewed Request for Reconsideration filed on April 11, 2005 provided additional discussion as to how the claimed invention is patentable over the references deemed most closely related to the subject matter encompassed by the claims.

However, on May 16, 2005 the Petitions Examiner issued a further Decision in which it was again alleged that the April 11, 2005 Renewed Request for Reconsideration still did not comply with requirement (e) of §1.102(d) in that it did not submit a detailed discussion of the references as to how the claimed subject matter is patentable over the references deemed most closely related to the subject matter encompassed by the claims. Thus, the May 16, 2005

Decision dismissed the Petition. In response to a subsequent Renewed Request for Reconsideration filed July 11, 2005, the Petitions Examiner indicated that the present application would not be accorded special status and that no further petitions to make special will be reviewed for this application (Decision dated August 29, 2005).

POINTS TO BE REVIEWED

In both the December 7, 2004 Petition and the April 11, 2005 and July 11, 2005 Renewed Requests for Reconsideration, a considerable amount of detail was provided as to how the claimed subject matter is patentable over the references deemed closely related to the subject matter encompassed by the claims. In fact, in both the December 7, 2004 Petition and the April 11, 2005 and July 11, 2005 Renewed Requests for Reconsideration, specific discussion was provided as to the exact features of the claims that were argued as not being taught or suggested by the references deemed most closely related to the subject matter encompassed by the claims.

For example, in the December 7, 2004 Petition, first and second features were identified as being recited in selected ones of the claims and the first and second features were shown as not being taught or suggested by the references deemed most closely related to the subject matter encompassed by the claims.

Further, for example, the April 11, 2005 and July 11, 2005 Renewed Requests for Reconsideration identified first through fourth features each being recited in a respective independent claim that were not taught or suggested by any of the references deemed most closely related to the subject matter encompassed by the claims.

Thus, as is quite clear from the above, sufficient detail was provided as to how Applicants' claimed invention is patentable over the references deemed most closely related to the subject matter encompassed by the claims.

The Examiner in the August 29, 2005 Decision alleges that the Renewed Request for Reconsideration dated July 11, 2005 did not comply with requirement (e) of §1.102(d) being that it argued that the references "fail to disclose or suggest [the identified features] in combination with other limitations recited in the claims". The Examiner goes on to state incorrectly that "in effect, this statement indicates that the entirety of each of the 19 independent claims is not disclosed by the references purported to be most closely related" and that "such a statement is not a sufficiently detailed description".

Applicants do not agree with this assessment by the Examiner in that the original Petition and the Renewed Requests for Reconsideration both not only identified particular distinguishing features recited in the claims that are not taught or suggested by the references, but also argued that the combination of the features and the other limitations recited in the claims are not taught or suggested by the references. It is entirely appropriate for Applicants to argue that the references do not teach the combination of the features recited in each of the claims. In fact such an argument complies with well-settled case law and United States Patent and Trademark Office policy since it is the combination of old and possibly new elements that renders a claim patentable.

As is clear from reading each of the Petition and the Renewed Requests for Reconsiderations the distinguishing feature(s) of each of the independent claims was specifically identified to permit the Examiner to evaluate that feature relative to the references. Whether these features are taken alone or in

combination with other limitations recited in each of the independent claims is in effect Applicants argument as to how the claims are patentable over the references. This is a well accepted argument according to case law and USPTO policy. Thus, applicants have fully complied with the requirements of §1.102(d). Therefore, the Decision by the Petitions Examiner should be withdrawn.

Even beyond the above, the objection to the “in combination” language of the Petition and the Renewed Requests for Reconsideration is completely contrary to well settled case law and United States Patent and Trademark Office policy. Attention is directed to various sections in MPEP Chapter 2100. Most notable is MPEP 2141.02 particularly the portion entitled “Distilling the invention down to a ‘gist’ or ‘thrust’ of an invention disregards ‘as a whole requirement’”. Attention is also directed to the decision in *Stratoflax v. Aeroquip* 218 USPQ 817 (Fed. Cir. 1983), *Schenck v. Norton* 218 USPQ 698 (Fed. Cir. 1983), *W. L. Gore and Associates v. Garlock* 220 USPQ 303 (Fed. Cir. 1983) and *Diamond v. Diehr* 209 USPQ at 9, and numerous other cases. The common thread in each of these Decisions and the above noted sections of the MPEP in chapter 2100 is that when considering the patentability of a claim, the claim must be considered “as a whole”. In other words, all limitations “in combination with each other” in a claim must be considered to determine patentability of the claim, and as such, arguing that specific features in combination with other limitations of the claims renders the claims patentable over the references is highly appropriate and satisfies the requirements of 37 CFR §1.102(b).


ACTION REQUESTED

In light of the above, Applicants request that the Director invoke supervisory authority in this matter and grant the Renewed Requests for Reconsideration as a Petition to Make Special so as to permit accelerated examination of the application.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (501.43144X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Daniel J. Stanger
Registration No. 32,846

DJS/CIB/jdc
Enclosures

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE



Applicants: Toshihiko MURAKAMI

Serial No.: 10/663,732

Filed: September 17, 2003

For: DATA TRANSFER METHOD

COPY

**PETITION TO MAKE SPECIAL
UNDER 37 CFR 1.102(d) and MPEP. §708.02, VIII**

MS Petition

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

December 7, 2004

Sir:

1. Petition

Applicants hereby petition to make this application **Special**, in accordance with 37 CFR §1.102(d) and MPEP 708.02, VIII. The present invention is a new application filed in the United States Patent and Trademark Office on September 17, 2003 and as such has not received any examination by the Examiner.

2. Claims

Applicants hereby represent that all the claims in the present application are directed to a single invention. If upon examination it is determined that all the claims presented are not directed to a single invention, Applicants will make an election without traverse as a prerequisite to the granting of special status.

3. Search

Applicants hereby submit that a pre-examination search, a copy of which is attached, has been made by a professional searcher.

The field of search covered:

<u>Class</u>	<u>Subclasses</u>
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711	114, 162, 202
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The above subclasses represent areas deemed to contain subject matter of interest to one or more of the search features. Additionally, a computer database search was conducted on the USPTO systems EAST and WEST; a keyword search was conducted in Class 710, subclasses 1, 5, 8 and 72; and Class 711, subclasses 111, 112, 113, 151, 163 and 206; as well as database searching for foreign patents and non-patent literature. Examiner Jack Lane in Class 711 (Art Unit 2188) was consulted in confirming the field of search.

4. Copy of References

A listing of all references found by the professional searcher is provided by a Form PTO-1449 and copies of the references and the Form PTO-1449 are submitted as part of an Information Disclosure Statement (IDS) filed on even date.

5. Detailed Discussion of the References and Distinctions Between the References and the Claims

Below is a discussion of the references uncovered by the search and cited in the IDS filed on even date that appear to be most closely related to the subject matter encompassed by the claims of the present application, and which discussion particularly

points out how Applicants' claimed subject matter is distinguishable over those references. All other references uncovered by the search and cited in the IDS filed on even date are **not** treated in detail herein.

a. Detailed Discussion of the References

Honda et al (U.S. Patent Publication Application No. 2004/0103261) shows a system and method of controlling data transfer between a host system and a plurality of storage devices. The computer system has a plurality of host computers (1), a plurality of storage devices (3), a virtualization controller (2) that is connected with the host computers (1) and storage devices (3), and a managing unit (4). The host computers (1), storage devices (3) and the managing unit (4) are connected with the virtualization controller (2) via a network (5), while the managing unit (4) is connected with the virtualization controller (2) via a network (5,6). See Figs. 1, 3-11 and paragraphs [0009]-[0012], [0044]-[0048].

Fujiwara et al (U.S. Patent No. 6,557,073) shows a storage apparatus including a virtual storage area for storing a virtual tape volume, a data transfer control program for controlling the data transfer among the virtual storage area. The data transfer control program forms groups of virtual tape volume having identical attributes. See Figs. 2-6, col. 2, lines 20-40 and col. 4, line 46 to col. 6, line 49 and summary.

Fujimoto et al (U.S. Patent Publication Application No. 2004/0103244) shows a system for managing a method for cluster-type storage including a plurality of data caching control units, having management units (60) that generate a table in which virtual volume (2) numbers (632) are assigned, on the basis of the tables in all the control clusters (71). Then, a copy of the portion related to each control cluster (71)

is transferred from the table to the target data caching control unit (21). See Figs. 1, 4, 5 and 16-18 abstract and paragraphs [0021]-[0022].

Rajan et al (U.S. Patent Publication No. 2004/0030822) shows a storage virtualization selection technique that automates a virtualization selection process including layering virtual disk objects on a file system comprising an organizing storage of the file system within volumes created among the managed disks, and creating the virtual disk as a storage object within one of the volumes. See Figs. 2, 3 and 6 and paragraphs [0021]-[0025].

White (U.S. Patent No. RE36,989), Hashimoto et al (U.S. Patent No. 5,787,487) Dekoning et al (U.S. Patent No. 6,567,889); Bober (U.S. Patent No. 6,718,372); Idei et al (U.S. Patent Application Publication No. 2003/0177330); George et al U.S. Patent Application Publication No. 2003/0182501); Eguchi et al (U.S. Patent Application Publication No. 2003/0221063); Oota (U.S. Patent Application Publication No. 2004/0064633); Serizawa (U.S. Patent Application Publication No. 2004/0098537); and Saito (Japanese Patent Number 03-288934) shows data transfer methods in virtualization of disk storage systems.

b. Distinctions Between the References and the Claims

The present invention as recited in the claims is not taught or suggested by any of the above noted references whether taken individually or in combination with each other or in combination with any of the other references now of record.

The present invention as recited in the claims is directed to a data transfer method computer system and relay device wherein the computer system includes a plurality of computers, a plurality of memory devices, the relay device which

connects the computers and the memory devices and a management device which manages the computers, the memory devices and the relay device.

According to the present invention, the management device sets virtual memory areas of the memory device for the computers and holds information on contents of the setting as first information. The relay device holds second information which is created based upon the first information. The virtual memory areas correspond to the memory areas in the respective memory devices or a memory area formed by combining memory areas in the memory devices. The relay device selects one virtual memory area from the second information and when the selected virtual memory area is a memory area formed by combining the memory areas in the memory devices as an opportunity, performs data transfer among the memory devices.

The above described features of the present invention as recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, for example, the above described features of the present invention are not taught or suggested by Honda. Honda teaches a system and method of controlling data transfer between a host system and a plurality of storage devices. As taught by Honda, a virtualization controller is connected between the host computers and the storage devices and a managing unit such that the virtualization controller controls data transfer process in a way such that the host computer can identify the destination volume using the same identification information that it uses to identify the source volume.

Thus, as is clear from above, the features of the present invention are not taught or suggested by Honda whether taken individually or in combination with any

of the other references of record. The same deficiencies noted above with respect to Honda are evident in each of the above identified references. Therefore, Applicants submit that the features of the present invention as recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other.

6. Fee (37 C.F.R. 1.17(i))

The fee required by 37 C.F.R. § 1.17(i) is to be paid by:

☒ the Credit Card Payment Form (attached) for \$130.00.

☐ charging Account _____ the sum of \$130.00.

A duplicate of this petition is attached.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER & MALUR, P.C., Deposit Account No. 50-1417 (501.43144X00).

Respectfully submitted,

MATTINGLY, STANGER & MALUR, P.C.

Carl I. Brundidge
Registration No. 29,621

CIB/jdc
Enclosures
(703) 684-1120



501.43144X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Toshihiko MURAKAMI

Serial No.: 10/663,732

Filed: September 17, 2003

For: DATA TRANSFER METHOD

COPY

**RENEWED REQUEST FOR RECONSIDERATION OF PETITION TO MAKE
SPECIAL UNDER 37 CFR 1.102(d) and MPEP §708.02, VIII**

MS Petition

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

April 11, 2005

Sir:

1. Petition

Applicants hereby renews its Petition to make this application **Special** previously submitted on December 7, 2004, in accordance with 37 CFR §1.102(d) and MPEP 708.02, VIII. The December 7, 2004 Petition was denied by a Decision issued on March 14, 2005 in which the Petitions Examiner stated that the December 7, 2004 Petition failed to recite distinct features of the claimed subject matter. The present Request for Reconsideration of Petition incorporates by reference the December 7, 2004 Petition and provides additional details regarding the claims and how the claimed subject matter is patentable over the references. The present invention is a new application filed in the United States Patent and Trademark Office on September 17, 2003 and as such has not received any examination by the Examiner

2. Claims

Applicants hereby represent that all the claims in the present application are directed to a single invention. If upon examination it is determined that all the claims presented are not directed to a single invention, Applicants will make an election without traverse as a prerequisite to the granting of special status.

3. Search

Applicants hereby submit that a pre-examination search has been made by a professional searcher.

The field of search covered:

<u>Class</u>	<u>Subclasses</u>
711	114, 162, 202

The above subclasses represent areas deemed to contain subject matter of interest to one or more of the search features. Additionally, a computer database search was conducted on the USPTO systems EAST and WEST; a keyword search was conducted in Class 710, subclasses 1, 5, 8 and 72; and Class 711, subclasses 111, 112, 113, 151, 163 and 206; as well as database searching for foreign patents and non-patent literature. Examiner Jack Lane in Class 711 (Art Unit 2188) was consulted in confirming the field of search.

4. Copy of References

A listing of all references found by the professional searcher is provided by a Form PTO-1449 and copies of the references and the Form PTO-1449 were submitted as part of an Information Disclosure Statement (IDS) filed on December 7,

2004. A copy of said December 7, 2004 Information Disclosure Statement is attached.

5. Detailed Discussion of the References and Distinctions Between the References and the Claims

Below is a discussion of the references uncovered by the search and cited in the IDS filed on December 7, 2004 that appear to be most closely related to the subject matter encompassed by the claims of the present application, and which discussion particularly points out how Applicants' claimed subject matter is distinguishable over those references. All other references uncovered by the search and cited in the IDS filed on December 7, 2004 (copy attached) are **not** treated in detail herein.

a. Detailed Discussion of the References

Honda et al (U.S. Patent Publication Application No. 2004/0103261) shows a system and method of controlling data transfer between a host system and a plurality of storage devices. The computer system has a plurality of host computers 1, a plurality of storage devices 3, a virtualization controller 2 that is connected with the host computers 1 and storage devices 3, and a managing unit 4. The host computers 1, storage devices 3 and the managing unit 4 are connected with the virtualization controller 2 via a network 5, while the managing unit (4) is connected with the virtualization controller 2 via a network 6. The virtualization controller (2) controls data transfer between the storage devices (3) and the host computers (1) in way that the host computers (1) can identify the destination volume (a volume to which data is transferred) using the same identification information that it used to identify the

source volume (a volume from which data is transferred). Further, when the virtualization controller (2) is replaced or a new virtualization controller is installed, the new virtualization controller controls the frame sending process in a way that the host computer (1) can access the same volume even after the replacement or installation using the same identification information that it used to identify the volume to be accessed, before the replacement or installation. See Figs. 1, 3-11 and paragraphs [0008]-[0012], [0044]-[0048].

Fujiwara et al (U.S. Patent No. 6,557,073) shows a storage apparatus including a virtual tape apparatus 3 connected to a host computer, and a tape library apparatus 2. The virtual tape apparatus 3 includes a control section 40 which controls cache memory 36, virtual tape information database 61, virtual storage area space map 62, real tape information database 63 and virtual storage area 50 for storing a virtual tape volume. A data control program 41 is provided in the control section 40 for controlling the data transfer between the host computer 1 and the virtual storage area 50. The data control program 41 forms groups of virtual tape volumes having identical attributes. See Figs. 2-6, col. 2, lines 20-40 and col. 4, line 46 to col. 6, line 49 and summary.

Fujimoto et al (U.S. Patent Publication Application No. 2004/0103244) shows a system and managing method for cluster-type storage configured so as to expand from small to large configurations at a remarkable cost. The cluster-type storage includes a plurality of protocol transformation units 10 that interface to the servers 3 and disks 2, a plurality of data caching control units 21 and a plurality of management units (60) that generate a management table 651 in which virtual volume (2) (VVOL 2#) of column (632) are assigned, on the basis of the tables 652-

654 in all the control clusters (71). A copy of the portion related to each control cluster (71) is transferred from the table to the target data caching control unit (21). See Figs. 1, 4, 5 and 16-18 abstract and paragraphs [0021]-[0022].

Rajan et al (U.S. Patent Publication No. 2004/0030822) shows a storage virtualization selection technique that automates a virtualization selection process including layering virtual disk objects on a volume of a file system of a multi-protocol storage appliance 100. The appliance includes a processor 122, memory 124, network adaptors 125, 126, and a storage adaptor 128. A storage operating system 200 also included in the appliance provides the virtualization system to logically organize the information as a hierarchical structure. Thus, the system disclosed organize storage of the file system within volumes created among the managed disks, and creates the virtual disk as a storage object within one of the volumes. See Figs. 2, 3 and 6 and paragraphs [0021]-[0025].

b. Distinctions Between the References and the Claims

The present invention as recited in the claims is not taught or suggested by any of the above noted references whether taken individually or in combination with each other or in combination with any of the other references now of record.

The present invention as recited in the claims is directed to a data transfer method, computer system and relay device wherein the computer system includes a plurality of computers, a plurality of memory devices, wherein the relay device connects the computers and the memory devices, and a management device which manages the computers, the memory devices and the relay device.

According to a first feature of the present invention, the management device

sets virtual memory areas of the memory device for the computers and holds information on contents of the setting as first information.

Further, according to a second feature of the present invention the relay device holds second information which is created based upon the first information. The virtual memory areas correspond to the memory areas in the respective memory devices or a memory area formed by combining memory areas in the memory devices.

Still further, according to a third feature of the present invention the relay device selects one virtual memory area from the second information and when the selected virtual memory area is a memory area formed by combining the memory areas in the memory devices as an opportunity, performs data transfer among the memory devices.

The above described first, second and third features of the present invention as recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other. Particularly, for example, the above described first, second and third features of the present invention as recited in the claims are not taught or suggested by Honda. Honda teaches a system and method of controlling data transfer between a host system and a plurality of storage devices. As taught by Honda, a virtualization controller is connected between the host computers and the storage devices and a managing unit such that the virtualization controller controls data transfer process in a way such that the host computer can identify the destination volume using the same identification information that it uses to identify the source volume.

Thus, as is clear from above, the first, second and third features of the present

invention as recited in the claims are not taught or suggested by Honda whether taken individually or in combination with any of the other references of record.

The same deficiencies noted above with respect to Honda are evident in each of the other references described above, namely Fujiwara, Fujimoto and Rajan. Each of the other references described above, namely Fujiwara, Fujimoto and Rajan disclose various virtualization techniques and apparatus. However, at no point in each of Fujiwara, Fujimoto and Rajan is there any teaching or suggestion of the above described first, second and third features of the present invention as recited in the claims. Thus, each of Fujiwara, Fujimoto and Rajan suffer from the same deficiencies with respect to the first, second and third features of the present invention as recited in the claims as Honda.

Therefore, Applicants submit that the features of the present invention as recited in the claims are not taught or suggested by any of the references of record whether taken individually or in combination with each other.

6. Conclusion

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The United States Patent and Trademark Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the United States Patent and Trademark Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is

patentable over the references, the United States Patent and Trademark Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.

Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (501.43144X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

Carl I. Brundidge
Registration No. 29,621

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